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WILLSON, Timothy M.

<120> AN ORPHAN NUCLEAR RECEPTOR

<130> 510-125

<140> 09/276,935

<141> 1999-03-26

<150> 60/079,593

<151> 1998-03-27

<160> 14

<170> PatentIn Ver. 2.0

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<223> Description of Artificial Sequence: DNA genome

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<223> Description of Artificial Sequence: DNA genome

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Met Lys Lys Gly His His His His His Gly 1 5 10

<210> 11

<211> 316

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<213> Artificial Sequence

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<223> Description of Artificial Sequence: Protein

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Met Lys Lys Gly His His His His His Gly Ser Glu Arg Thr Gly
1 5 10 15

Thr Gln Pro Leu Gly Val Gln Gly Leu Thr Glu Glu Gln Arg Met Met
20 25 30

Ile Arg Glu Leu Met Asp Ala Gln Met Lys Thr Phe Asp Thr Thr Phe 35 $\int_{-\frac{1}{2}}^{-\frac{1}{2}} 40$ 45

Ser His Phe Lys Asn Phe Arg Leu Pro Gly Val Leu Ser Ser Gly Cys
50 55 60

Glu Leu Pro Glu Ser Leu Gln Ala Pro Ser Arg Glu Glu Ala Ala Lys 65 70 75 80

Trp Ser Gln Val Arg Lys Asp Leu Cys Ser Leu Lys Val Ser Leu Gln 85 90 95

Leu Arg Gly Glu Asp Gly Ser Val Trp Asn Tyr Lys Pro Pro Ala Asp 100 105 110

Ser Gly Gly Lys Glu Ile Phe Ser Leu Pro His Met Ala Asp Met 115 120 125

Ser Thr Tyr Met Phe Lys Gly Ile Ile Ser Phe Ala Lys Val Ile Ser 130 140

Tyr Phe Arg Asp Leu Pro Ile Glu Asp Gln Ile Ser Leu Leu Lys Gly 145 150 155

Ala Ala Phe Glu Leu Cys Gln Leu Arg Phe Asn Thr Val Phe Asn Ala 165 170 175

Glu Thr Gly Thr Trp Glu Cys Gly Arg Leu Ser Tyr Cys Leu Glu Asp 180 185 190

Thr Ala Gly Gly Phe Gln Gln Leu Leu Glu Pro Met Leu Lys Phe 195 200 205

His Tyr Met Leu Lys Lys Leu Gln Leu His Glu Glu Glu Tyr Val Leu 210 215 220

Met Gln Ala Ile Ser Leu Phe Ser Pro Asp Arg Pro Gly Val Leu Gln 225 230 235 240

His Arg Val Val Asp Gln Leu Gln Glu Gln Phe Ala Ile Thr Leu Lys 245 250 255

Ser Tyr Ile Glu Cys Asn Arg Pro Gln Pro Ala His Arg Phe Leu Phe 260 265 270

Leu Lys Ile Met Ala Met Leu Thr Glu Leu Arg Ser Ile Asn Ala Gln 275 280 285

His Thr Gln Arg Leu Leu Arg Ile Gln Asp Ile His Pro Phe Ala Thr 290 295 300

Pro Leu Met Gln Glu Leu Phe Gly Ile Thr Gly Ser 305 310 315

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<211> 242

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Protein

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Met Lys Lys Gly Ser Ala Asn Glu Asp Met Pro Val Glu Arg Ile Leu 1 5 10 15

Glu Ala Glu Leu Ala Val Glu Pro Lys Thr Glu Thr Tyr Val Glu Ala 20 25 30

Asn Met Gly Leu Asn Pro Ser Ser Pro Asn Asp Pro Val Thr Asn Ile 35 40 45

Cys Gln Ala Ala Asp Lys Gln Leu Phe Thr Leu Val Glu Trp Ala Lys 50 55

Arg Ile Pro His Phe Ser Glu Leu Pro Leu Asp Asp Gln Val Ile Leu 65 70 75 80

Leu Arg Ala Gly Trp Asn Glu Leu Leu Ile Ala Ser Phe Ser His Arg 85 90 95

Ser Ile Ala Val Lys Asp Gly Ile Leu Leu Ala Thr Gly Leu His Val 100 105 110

His Arg Asn Ser Ala His Ser Ala Gly Val Gly Ala Ile Phe Asp Arg 115 120 125

Val Leu Thr Glu Leu Val Ser Lys Met Arg Asp Met Gln Met Asp Lys 130 140

Thr Glu Leu Gly Cys Leu Arg Ala Ile Val Leu Phe Asn Pro Asp Ser 145 150 155

Lys Gly Leu Ser Asn Pro Ala Glu Val Glu Ala Leu Arg Glu Lys Val 165 170 175 Tyr Ala Ser Leu Glu Ala Tyr Cys Lys His Lys Tyr Pro Glu Gln Pro Gly Arg Phe Ala Lys Leu Leu Leu Arg Leu Pro Ala Leu Arg Ser Ile Gly Leu Lys Cys Leu Glu His Leu Phe Phe Phe Lys Leu Ile Gly Asp 215 Thr Pro Ile Asp Thr Phe Leu Met Glu Met Leu Glu Ala Pro His Gln 225 230 Met Thr <210> 13 <211> 2146 <212> DNA <213> Artificial Sequence <220> <223> Description of Artificial Sequence: DNA genome <400> 13 tgaaatatag gtgagagaca agattgtctc ataptcgggg aaatcataac ctatgactag 60 gacgggaaga ggaagcactg cetttactte agrgggaate teggeeteag cetgeaagee 120 aagtgttcac agtgagaaaa gcaagagaat aagctaatac teetgteetg aacaaggcag 180 eggeteettg gtaaagetae teettgateg atcodittgea eeggattgtt caaagtggae 240 cccaggggag aagtcggagc aaagaactta ccaccaggca gtccaagagg cccagaagca 300 aacctggagg tgagacccaa agaaagctgg aaccatgctg actttgtaca ctgtgaggac 360 acagagtetg tteetggaaa geecagtgte aacgeagatg aggaagtegg aggteeceaa 420 atotgoogtg tatgtgggga caaggcoact ggctatcact tcaatgtcat gacatgtgaa 480 ggatgcaagg gettttteag gagggceatg aaacgcaacg ceeggetgag gtgeeeette 540 eggaagggeg cetgegagat caceeggaag aceeggegae agtgecagge etgeegeetg 600 cgcaagtgcc tggagagcgg catgaagaag gagatgatça tgtccgacga ggccgtggag 660 gagaggeggg cettgateaa geggaagaaa agtgaaegga cagggaetea geeaetggga 720 gtgcaggggc tgacagagga gcagcggatg atgatcaggg agctgatgga cgctcagatg 780 aaaacctttg acactacctt ctcccatttc aagaatttcc ggctgccagg ggtgcttagc 840 agtggetgeg agttgecaga gtetetgeag gececatega gggaagaage tgecaagtgg 900 agccaggtcc ggaaagatct gtgctctttg aaggtctctc tgcagctgcg gggggaggat 960 ggcagtgtct ggaactacaa acccccagcc gacagtggcg ggaaagagat cttctccctg 1020 ctgccccaca tggctgacat gtcaacctac atgttcaaag gcatcatcag ctttgccaaa 1080 gtcatctcct acttcaggga cttgcccatc gaggaccaga tctccctgct gaagggggcc 1140 getttegage tgtgteaact gagatteaac acagtgttea acgeggagae tggaacetgg 1200 gagtgtggcc ggctgtccta ctgcttggaa gacactgcag gtggcttcca gcaacttcta 1260 ctggagccca tgctgaaatt ccactacatg ctgaagaagc tgcagctgca tgaggaggag 1320 tatgtgctga tgcaggccat ctccctcttc tccccagacc gcccaggtgt gctgcagcac 1380 cgcgtggtgg accagctgca ggagcaattc gccattactc tgaagtccta cattgaatgc 1440 aateggeece ageetgetea taggttettg tteetgaaga teatggetat geteacegag 1500 cteegeagea teaatgetea geacacceag eggetgetge geateeagga catacaccec 1560 tttgctacgc ccctcatgca ggagttgttc ggcatcacag gtagctgagc ggctgccctt 1620 gggtgacacc tccgagaggc agccagaccc agagccctct gagcagccac tcccgggcca 1680 agacagatgg acactgccaa gagccgacaa tgccctgctg gcctgtctcc ctagggaatt 1740 cctgctatga cagctggcta gcattcctca ggaaggacat gggtgcccc cacccccagt 1800 tcagtctgta gggagtgaag ccacagactc ttacgtggag agtgcactga cctgtaggtc 1860 aggaccatca gagaggcaag gttgcccttt ccttttaaaa ggccctgtgg tctggggaga 1920 aatccctcag atcccactaa agtgtcaagg tgtggaaggg accaagcgac caaggatagg 1980

coatetgggg tetatgecea catacceaeg titigtteget teetgagtet titeattget 2040 acetetaata greetgtete coaetteea etegtteee teetetteeg agetgetitig 2100

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<223> Description of Artificial Sequence: Protein

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Cys Glu Asp Thr Glu Ser Val Pro Gly Lys Pro Ser Val Asn Ala Asp 20 25 30

Glu Glu Val Gly Gly Pro Gln Ile Cys Arg Val Cys Gly Asp Lys Ala 35 40 45

Thr Gly Tyr His Phe Asn Val Met Thr Cys Glu Gly Cys Lys Gly Phe 50 55

Phe Arg Arg Ala Met Lys Arg Asn Ala Arg Leu Arg Cys Pro Phe Arg 65 70 75 80

Lys Gly Ala Cys Glu Ile Thr Arg Lys Thr Arg Arg Gln Cys Gln Ala 85 90 95

Cys Arg Leu Arg Lys Cys Leu Glu Ser Gly Met Lys Lys Glu Met Ile 100 105 110

Met Ser Asp Glu Ala Val Glu Glu Arg Arg Ala Leu Ile Lys Arg Lys 115 120 125

Lys Ser Glu Arg Thr Gly Thr Gln Pro Leu Gly Val Gln Gly Leu Thr 130 135 140

Glu Glu Gln Arg Met Met Ile Arg Glu Leu Met Asp Ala Gln Met Lys 145 150 155 160

Thr Phe Asp Thr Thr Phe Ser His Phe Lys Asn Phe Arg Leu Pro Gly
165 170 175

Val Leu Ser Ser Gly Cys Glu Leu Pro Glu Ser Leu Gln Ala Pro Ser 180 185

Arg Glu Glu Ala Ala Lys Trp Ser Gln Val Arg Lys Asp Leu Cys Ser 195 200 205

Leu Lys Val Ser Leu Gln Leu Arg Gly Glu Asp Gly Ser Val Trp Asn 210 215 220

Tyr Lys Pro Pro Ala Asp Ser Gly Gly Lys Glu Ile Phe Ser Leu Leu 225 230 235 240

Pro His Met Ala Asp Met Ser Thr Tyr Met Phe Lys Gly Ile Ile Ser 245 250 255

Phe Ala Lys Val Ile Ser Tyr Phe Arg Asp Leu Pro Ile Glu Asp Gln 260 265 270

Ile Ser Leu Leu Lys Gly Ala Ala Phe Glu Leu Cys Gln Leu Arg Phe 275 280 285

Asn Thr Val Phe Asn Ala Glu Thr Gly Thr Trp Glu Cys Gly Arg Leu 290 295 300

Ser Tyr Cys Leu Glu Asp Thr Ala Gly Gly Phe Gln Gln Leu Leu 2005 310 315 320

Glu Pro Met Leu Lys Phe His Tyr Met Leu Lys Lys Leu Gln Leu His
325 _____ 330 335

Glu Glu Glu Tyr Val Leu Met Gln Ald Ile Ser Leu Phe Ser Pro Asp 340 350

Arg Pro Gly Val Leu Gln His Arg Val Val Asp Gln Leu Gln Glu Gln 355 360 365

Phe Ala Ile Thr Leu Lys Ser Tyr Ile Glu Cys Asn Arg Pro Gln Pro 370 380

Ala His Arg Phe Leu Phe Leu Lys Ile Met Ala Met Leu Thr Glu Phe 385 390 395 400

Ala Thr Pro Leu Met Gln Glu Leu Phe Gly Ile Thr Gly Ser 405